

ABSTRACT OF THE DISCLOSURE

An information processing system which self-detects a change in the actual performance of memory elements due to mounting positions, change in environment, and aging changes to enable the memory elements to stably operate at the highest possible performance without shutting down the system. For implementing an optimal memory access for each of memory elements mounted in a memory unit, a memory controller is provided with a memory timing table which stores operation timings corresponding to the respective memory elements. The timing table is updated in response to an instruction from an apparatus for monitoring the memory operation, and the updated table is applied to a processing request after the update instruction. The apparatus for monitoring the memory operation includes an environmental sensor disposed around the memory elements, a counter for accumulating error information which is generated each time the memory unit is accessed, and so on.